VOLUME I · OCTOBER 1946 · NUMBER 7

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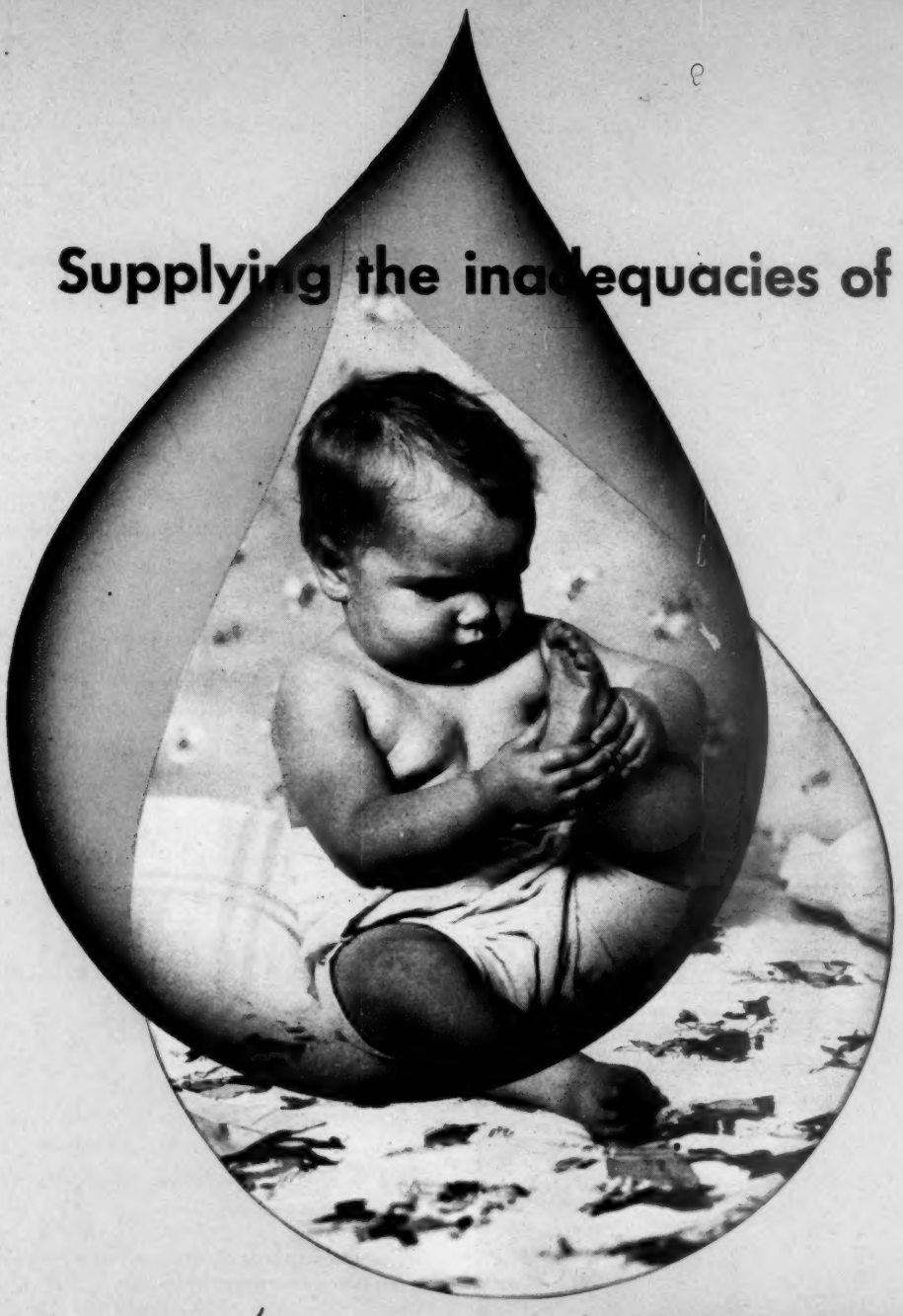

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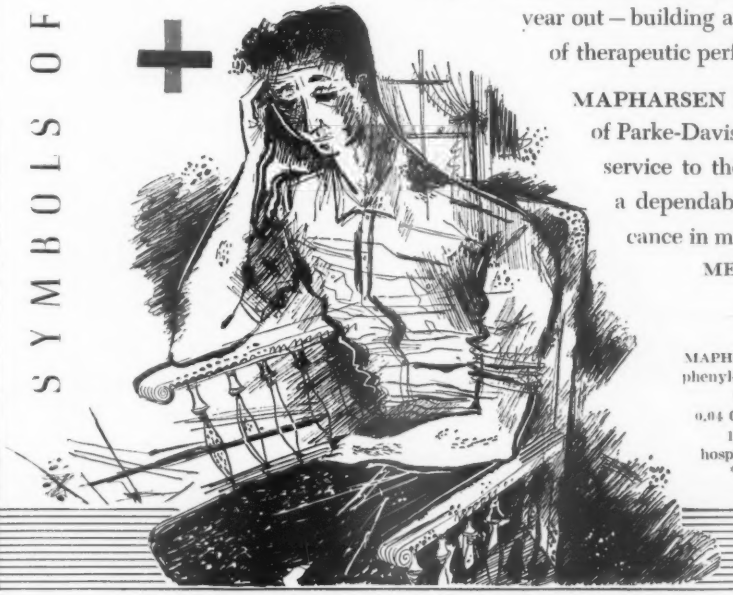

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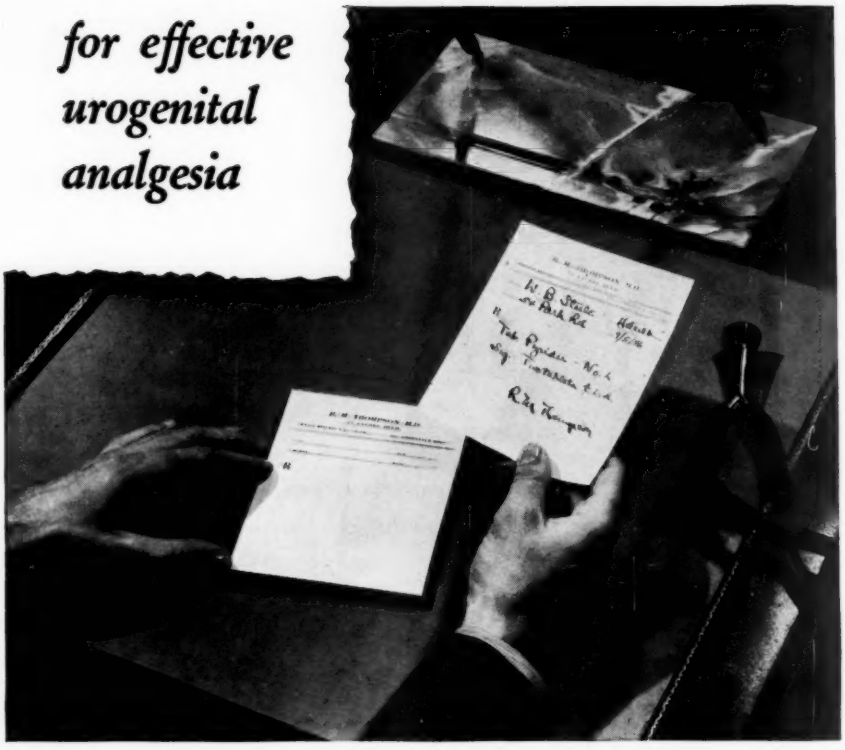

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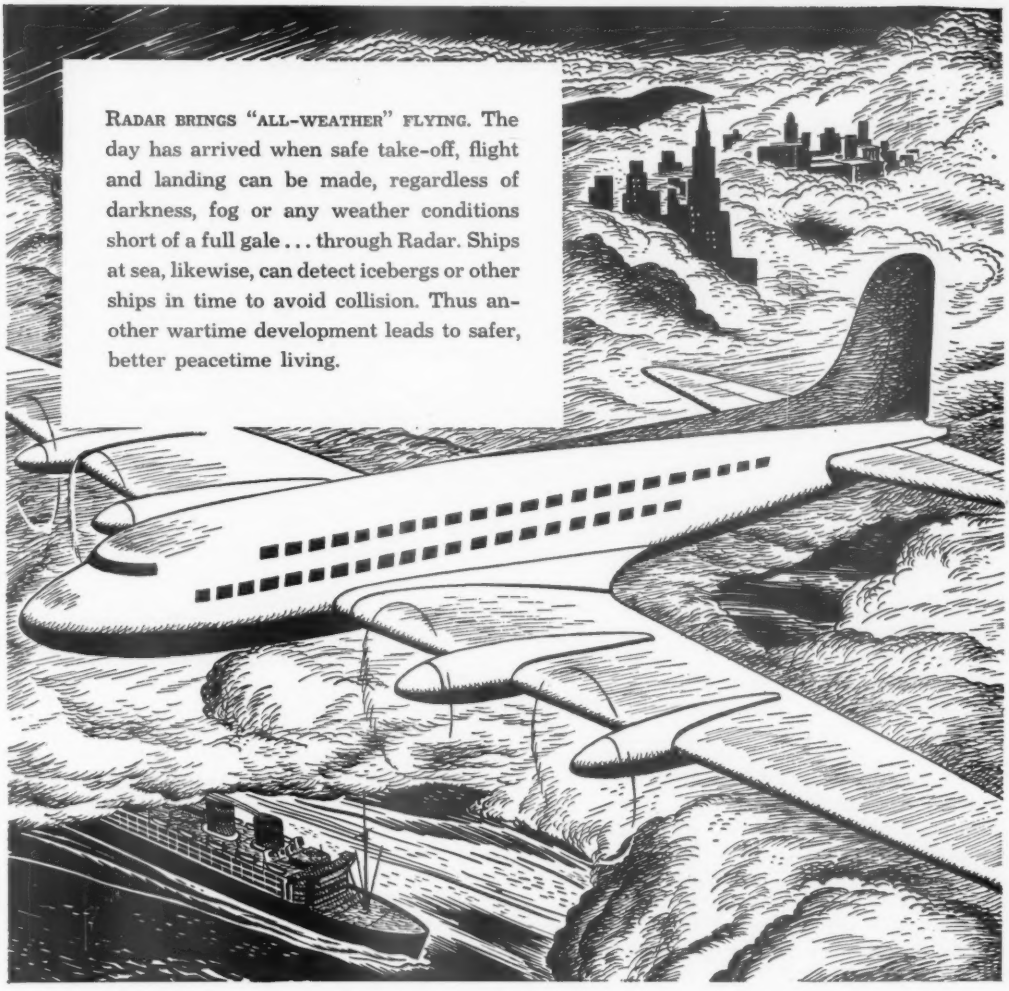

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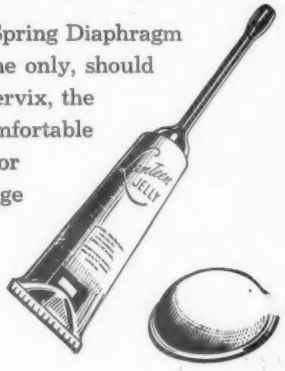

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EDITORIAL

WOMEN IN MEDICINE

ALMOST A CENTURY has passed since women first began to practice medicine in America. The hostility that confronted the pioneer women physicians has been almost forgotten, but even to-day there is discrimination. Medical colleges limit their registration of women to a small percentage of the total enrollment.

Why this limitation? The most common reason given is that women leave the profession, making it sheer waste to spend large sums of money on their training.

An answer to the question as to the professional effectiveness and stability of women physicians was given recently by two women professors of Barnard College, not M.D.'s but Ph.D.'s, who reported the results of an investigation they had made to discover what use women made of their medical training.

Dr. Florence DeL. Lowther, Associate Professor of Zoology, and Dr. Helen R. Downes, Professor of Chemistry, made a survey covering the eighteen-to-twenty-year record of women graduates of seven medical schools—Columbia, Cornell, Johns Hopkins, New York, and Yale universities, the University of Pennsylvania, and the Woman's Medical College of Pennsylvania. The results of the study were published in the *Journal of the American Medical Association,* October 13, 1945.

Such loose statements as, "Fifty per cent of the women drop out of the medical profession," were found to have no foundation in fact. Of the 1,240 women graduates covered in the survey, 1,115, or 90 per cent, were in full-time medical work in 1942-1943. This work included, besides medical practice, public health work, medical research, teaching in medical colleges, and institutional medicine. Lest the war be considered responsible for the large number of active women physicians, the investigators pointed out that their information was gathered too early to reflect the influence of the war emergency.

The assumption that most women leave the profession when they marry likewise proved to be unfounded, for 82 per cent of those who had married remained in full-time medical work.

To justify their professional status women, of course, must do more than remain in medical work. They must make some contribution or in some way advance the profession. No exact measurement of such contributions was possible, but one fairly good index of professional achievement on the part of women physicians was found in the number of specialists and another in the number holding professorships in medical colleges.

The survey showed that 24 per cent of those engaged in full-time medical work had taken enough advanced work to qualify as exclusive specialists, while a further 8 per cent qualified as partial specialists. In view of women's handicap in getting hospital appointments, this is a large representation. Of the exclusive specialists, the largest number, 24 per cent, devoted themselves to pediatrics, while 15 per cent specialized in psychiatry, 12 per cent in internal medicine, and only 11 per cent in obstetrics and gynecology.

Although the number of medical women of professorial rank was found to be small—only 50—it was not negligible in view of the prejudice that is known to exist in most medical schools against giving teaching appointments to women. And it is noteworthy that 31 of the 50 had been able in the face of such prejudice to win positions on the faculties of co-educational medical colleges.

This study was confined to eastern colleges, but probably the results would not vary greatly if a similar survey were made, for example, in the Middle West. Most medically trained women do remain in the profession and a considerable proportion become specialists. In Chicago, for exam-

ple, acording to the latest Directory of the American Medical Association (1942), 404 women are engaged in the active practice of medicine. Of these, 84 are listed as limiting their practice to a definite specialty. This is approximately 21 per cent, a figure very close to that of Lowther and Downes. Here, it may be of interest to note, the leading specialty is psychiatry, with 18 per cent. Obstetrics and gynecology come next, with 15.5 per cent, and pediatrics third, with 14 per cent. Of the 15 members of the board of directors of Branch No. 2, Chicago, of the American Medical Women's Association, 13 limit their practice to special fields.

The record of women in medicine indicates that they have made good use of their opportunities for training and that the present limitation of such opportunities is unjustified. If their opportunities for medical training and practice are broadened, women can be counted on to render correspondingly greater service to medicine.

EVANGELINE E. STENHOUSE, M.D.
President, Branch No. 2, Chicago
American Medical Women's Association

CHICAGO NUMBER

THE SCIENTIFIC AND clinical articles in this issue of the JOURNAL have been supplied by members of Branch No. 2, Chicago, of the American Medical Women's Association. To all of these contributors the Editors wish to offer thanks for their fine co-operation and to express appreciation of the high quality of the articles submitted.

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Multiple Intestinal Parasitic Infections*

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IT IS AN ACCEPTED fact that multiple intestinal parasitic infection is not an uncommon occurrence. This is of particular importance at present when ex-servicemen who have encountered a variety of sanitary conditions are returning from all over the world. Too often, both the clinician and the parasitologist accept the first pathogenic parasite observed in a stool specimen as the sole etiological factor responsible for the gastro-intestinal disturbances. When no ova or parasites are found, the stool is considered negative. In each instance, no further examinations are made at the time. If the patient harbors some of the comparatively benign parasites, for example, E. coli,[1] E. nana,[1] or D. fragilis,[2] but no E. histolytica, treatment for amebiasis is frequently omitted. This is a mistake since further examination might reveal an E. histolytica, and since there is also increasing evidence of the possible pathogenicity of E. nana and D. fragilis because gastro-intestinal symptoms may subside after treatment for amebiasis when one or the other was the only ameba found.

It is important to find all the infectious parasites harbored by a person because the chemotherapy is specific and different for amebae, flagellates, and helminths. For example, a person harboring E. histolytica and a tapeworm must receive specific treatment for each. Repeated stool examinations by a trained parasitologist should be made upon a patient with gastro-intestinal symptoms because it is known that the greater the number of stools examined the higher the percentages of positives. A suitable specimen is essential for an accurate diagnosis. For example, a warm, liquid, watery stool for the detection of amebae, a rectal swab for pinworm, etc. In brief, repeated examinations by a combination of methods is necessary for the examination of feces for ova and parasites.

Our routine method for stool examination is as follows: After a gross examination, a wet smear preparation is observed microscopically. A culture of the stool is made, and a concentrate is examined. Table I illustrates the method and the results in one case (Case 13, T.B., Table II). The close co-operation between the physician in charge of the patient and the parasitologist is an advantage, and a detailed history of the patient in regard to his past and present environmental conditions, his gastro-intestinal symptoms if any, and his eating habits, is helpful.

A series of cases (Table II) has been selected to illustrate various combinations of intestinal parasites observed in our laboratory. Needless to say, many other combinations have been encountered and many more are possible. Some of the cases selected had acute gastro-intestinal symptoms; others had mild symptoms such as a feeling of lassitude and lack of energy; and others had no recognizable symptoms. A few case reports to illustrate these clinical conditions follow:

Case 1. R. J., a male, age ten years, entered the hospital because of an abrupt onset of abdominal pain and acute diarrhea (5 to 6 watery stools), headache, and a temperature of 105° F. There was a history of intermittent diarrhea for the past six years and a previous diagnosis of amebic dysentery and treatment. The child appeared acutely ill. With the exception of marked tenderness and rigidity over the abdomen, the physical examination was essentially negative. A number of fresh warm stools were sent to the

*This study was aided by a grant from the Committee on Scientific Research of the American Medical Association.

METHODS USED IN EXAMINING STOOLS FOR OVA AND PARASITES
(Case 13, T. B.)

DATE	DIRECT SMEAR OF STOOL	AMEBIC CULTURE	CONCENTRATE OF STOOL
6-25-46	E. histolytica, motile E. histolytica, cysts E. coli, cysts	E. histolytica, motile (Blastocystis)	E. histolytica, cysts E. coli, many cysts Trichocephalus trichiuris, ova
6-26-46	E. histolytica, motile E. histolytica, cysts	E. histolytica, motile (Blastocystis)	E. histolytica, cysts Trichocephalus trichiuris, ova
6-28-46	E. histolytica, motile E. coli, cysts	E. histolytica, motile (Blastocystis)	E. histolytica, cysts Trichocephalus trichiuris, ova
7-2-46	E. histolytica, cysts E. coli, cysts	Trichocephalus trichiuris, ova (Blastocystis)	E. histolytica, cysts Trichocephalus trichiuris, ova E. coli, cysts
7-3-46	E. histolytica, cysts E. coli, cysts	E. histolytica, motile (6 hour culture)	E. histolytica, cysts E. coli, cysts
8-5-46	Negative	Negative	Negative

TABLE I

laboratory for examination and were found to contain active E. histolytica, E. coli, and cysts of Giardia lamblia. Bacteriological cultures were negative for bacillary dysentery. The boy improved rapidly under treatment for amebiasis and was discharged on the 19th day. The stool still contained Giardia cysts, but was negative for amebae.

Case 2. F. J., a male, age eleven years, a brother of R. J., entered the hospital a month after his brother's discharge. The history of onset was similar to that of his brother but more acute. He started with vomiting, acute diarrhea (foul smelling watery stools), and a temperature of 104° F., and he was very lethargic. The physical examination revealed a semi-comatose child with slight rigidity of the neck, tenderness over the abdomen, petechiae on the skin over the chest and the neck, and an ulcer between the fourth and fifth toes of the left foot. In view of the family history, fresh warm stools were immediately sent to the laboratory and examined. The specimens contained E. histolytica, E. coli, and D. fragilis. Cultures for amebae revealed the same parasites. The stools were negative for bacteria of the dysentery and salmonella groups. Because of the stiff neck and petechiae, cerebrospinal fluid was examined, blood cultures were drawn, and nasopharyngeal cultures were taken. The cerebrospinal fluid and blood cultures were sterile. The nasopharyngeal cultures contained staphylococcus, streptococcus, and diphtheroids. Hemolytic Staphylococcus albus was cultured from the ulcer between the toes. Specific treatment (carbarsone) was started for amebae. Warm stools were examined daily. Within two weeks, cysts and vegetative forms of the amebae were eliminated from the stools, but ova of Hymenolepis nana were found in the concentrate. After a confirmatory examination, treatment (oil of aspidium followed by magnesium sulfate) was given and the dwarf tapeworm was passed. Ten days later the patient was discharged from the hospital after having three successive stool examinations that were negative for ova and parasites. The social worker reported that several other children in the family had similar but less severe gastro-intestinal symptoms. The family was reported to the Board of Health and the subsequent history is unknown.

We have had the opportunity of examining stools from a number of persons returning from tropical regions. Most of them contained one or more intestinal parasites. Case 10 (Table II) is typical.

Case 10. I. H., a male, age 23, a veteran, had been in the Southern Pacific area for two years. He had never had malaria, and he had passed the medical examination for discharge the year before. He had been able to work continuously throughout the year, but he always felt tired and had a general feeling of ill-being. Because of this feeling of malaise, he consulted a physician. The physical examination, including a detailed blood examination, was essentially negative. A stool sent

to the laboratory for examination contained motile D. fragilis, cysts and motile forms of E. nana in direct smear and in culture, and Necator americanus in the concentrate. A specimen two days later confirmed the previous findings, and the patient was treated for hookworm, and later for amebae, though E. histolytica had not been observed.

After several weeks three successive specimens of stools were negative for ova and parasites. The patient appeared more energetic and he stated that his health was greatly improved.

Each incoming student nurse submits a stool for examination to rule out E. typhosa, B. dysenteriae, salmonella, ova, and parasites. The percentage of positives for E. histolytica in the freshman class averages about 10. In a surprising number, E. histolytica is associated with other intestinal parasites. Clinical symptoms are frequently slight or entirely lacking. A typical case is that of H. K.

Case 7. H. K., a female, age 27, apparently in good health entered the nurse's training course. The routine stool examination revealed E. histolytica, E. coli, D. fragilis, and Trichomonas hominis. The nurse was surprised and most co-operative. She had no idea where or when she might have been infected with the intestinal parasites. She

TABLE II

CASES OF MULTIPLE INTESTINAL PARASITISM

PARASITES	CASES														
	1 RJ	2 FJ	3 IL	4 D G	5 BC	6 H K	7 J S	8 MW	9 J A	10 I H	11 L S	12 M P	13 T B	14 L B	15 MB
Endameba histolytica	+	+	+	+	+	+					+		+		+
Endameba coli	+	+	+	+	+	+	+					+	+		
Endolimax nana			+				+		+	+	+	+			
Dientameba fragilis		+	+	+		+	+	+		+					
Iodameba butschlii									+						
Chilomastix mesnili				+											+
Trichomonas hominis					+	+									
Giardia lamblia								+	+						
Enterobius vermicularis			+				+	+							
Hymenolepis nana		+													
Taenia saginata											+				
Necator americanus										+					
Trichocephalus trichiuris													+	+	
Ascaris lumbricoides												+		+	+

had lived for twenty years in a city of 50,000 with an excellent sanitary system. Her gastro-intestinal history was practically negative: she was rarely constipated, and could remember only a few episodes of slight diarrhea unaccompanied by pain. Her blood count was normal. Appropriate chemotherapy was given and after several weeks three successive specimens were negative for all intestinal ova and parasites.

She volunteered that she felt more energetic and had more endurance—she had supposed that the previous "tired feeling" was normal.

One might cite cases indefinitely but the few given illustrate the symptomatology of the persons who harbor multiple intestinal parasites.

Conclusions

1. Multiple intestinal parasitic infection is not uncommon.
2. The symptoms of the person harboring the parasite may be acute, mild, or even unrecognized.
3. The identification of all the parasites present in a specimen of feces is important because of the specificity of treatment.
4. The identification of the intestinal parasites requires repeated examinations of suitable specimens by a competent parasitologist using a combination of methods.

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Treatment of Passive Rh Isosensitization in the Newborn (Erythroblastosis Fetalis) With Rh-Positive Blood

*Use of Blood of the same Rh Type as That of the Father.**

CLEMENTINE FRANKOWSKI, M.D., and RUTH RENTER DARROW, M.D.

BEFORE THE DISCOVERY by Levine[1] of the role which the Rh factor plays in the etiology of "erythroblastosis fetalis," affected babies were being successfully treated by repeated blood transfusions. In many instances the father of the child was recorded in the published case history as the donor. A case in point is that of "Baby G" mentioned by de Lange and Arntzenius[2], in which the infant after receiving 40 cc. of the father's blood received a further unknown amount directly into the longitudinal sinus. The jaundice cleared quickly, the marked erythroblastemia disappeared, the liver and spleen became of normal size, and although the anemia recurred, a complete recovery was achieved. Following Levine's discovery Burnham presented a case in which the infant was successfully treated with three transfusions of father's blood.[3] It was difficult, therefore, for some observers who had seen babies with this disease successfully treated with father's blood, to be entirely convinced of the necessity for the use of Rh-negative blood in the transfusions of these babies. The weight of professional opinion, however, has been overwhelmingly against the use of Rh-positive blood in this disease. Indeed, treatment by simultaneous exsanguination and transfusion with Rh-negative blood has been both advised and practiced as the best in skillful management of this disease.

This insistence on the use of Rh-negative blood is based on the fact that transfused Rh-positive erythrocytes are as susceptible to destruction in the body of the affected infant as are the baby's own red blood cells. It is also based upon the assumption that "hemolysis" is the pathologic process responsible for all the clinical symptoms in the child and for the pathologic changes resulting in death. Lately, however, those whose experience has demonstrated the fallacy of the idea that Rh-positive blood is either harmful or ineffective in the treatment of the affected infant have begun to express themselves. Koucky,[4] Turner,[5] and more recently Sanford[6] and Danis, Eto, and Sennott[7] have expressed their conclusions that Rh-positive blood can be successfully used in the treatment of this disease of the newborn. Danis and his coworkers have found further that father's blood seems particularly effective.

In the two cases presented here it will be seen that both father's blood and blood of a donor having the same Rh type as that of the father, were used with marked success in the treatment of two babies with familial erythroblastosis.

Baby J, born at the Women and Children's Hospital on April 29, 1946, was the mother's third child. The first child, a boy, now four years of age, has always been normal and well. The second child became jaundiced on the third day, and developed opisthotonos and spasticity of the extremities on the fifth day. A diagnosis of nuclear icterus was made. He died of pneumonia with a marked hyperpyrexia at five and one-half months of age. Subsequent to his birth, investigation by Dr. I. Davidsohn showed a low titer of anti-Rh isoagglutinins in the serum of the Rh-negative mother, while the father and child were Rh-positive. Father, mother, and child belonged to blood group O.

*From the Women and Children's Hospital, Chicago.

Before the birth of the third child the Rh type of the father was found to be Rh_1, and the mother showed a low titer of blocking antibodies and of isoagglutinins. It was possible to forecast that the blood group of the child would be O, and that the child, if affected, would be Rh_1. On birth the child was noticeably pale. A count of the cord blood showed 2.05 million erythrocytes, 23,100 leucocytes (corrected) and 11,900 nucleated red cells per cu. mm., with 9 gm. of hemoglobin. The liver edge and tip of the spleen were each palpated two fingers, respectively, below the costal margins. Although not icteric at birth, the icterus index of the cord blood was 63 and the van den Bergh reaction was biphasic. Jaundice was easily apparent by the end of the first hour after birth. On cross-matching, the father's blood was found compatible, and a transfusion of 100 cc. of citrated blood, followed by 5 cc. of 10 per cent calcium gluconate, was given intravenously within four hours after birth. Oxygen was given until the erythroblastemia disappeared, and 40 cc. of 5 per cent dextrose was given subcutaneously twice daily except when transfusions were given. A second transfusion of 70 cc. of father's blood was given 24 hours after the first, followed by 60 cc. of 5 per cent dextrose in 0.85 per cent sodium chloride solution. No edema was noted at any time. The jaundice which deepened during the first twenty-four hours, receded rapidly after the second transfusion, and by the seventh day was not perceptible. On the eighth day the red cells numbered 3.48 million with a hemoglobin of 78 per cent, the liver and spleen were not palpable, the infant was taking his feedings well and examination revealed no abnormality of any kind except a slight pallor. Since the father had a slight upper respiratory infection at this time, a transfusion of 120 cc. of citrated group O, Rh-positive (untyped) blood from the father's brother was given intravenously. Following this the baby could not be distinguished from other normal newborn infants in the nursery. The anemia, however, again began to increase slowly but without any deteriorating effects, and at five and one-half weeks of age he was given a fourth transfusion of 150 cc. of blood from the father. He has continued to develop normally in every respect.

Baby D, was born at the Women and Children's Hospital on September 21, 1941. She was the fourth child, the first two of whom were normal. The third child became jaundiced within the first 24 hours of life, and showed the typical blood picture of erythroblastosis fetalis. Three transfusions on the 2nd, 7th, and 10th days seemed to be bringing about recovery, when a hemorrhagic diathesis developed. Intracranial hemorrhage at 5 weeks of age resulted in his death at five and one-half weeks. He had been breast-fed. The mother belonged to blood group O, the father to blood group A.

Studies made at birth on the cord blood of the fourth child revealed an icterus index of 32, a "faint, delayed" direct van den Bergh reaction and an anemia (2.76 red blood cells per cu. mm.) with a moderate erythroblastemia (5,160 nucleated red cells per cu. mm.). She belonged to blood group O. The erythrocyte count and hemoglobin had risen one hour after birth to 4.6 million and 96 per cent, respectively. Two transfusions of pooled plasma, 80 cc. each, were given intravenously one hour and 24 hours after birth, and the infant received oxygen, three liters for fifteen minutes eight times daily. No benefit whatever could be detected from the plasma, although the nucleated red cells disappeared rapidly from the blood. The baby became extremely jaundiced, and at 48 hours of age she was apathetic and drowsy, and had to be given fluids with a medicine dropper. The red cell count was 3.32 million, the hemoglobin 84 per cent. At this time she was given a transfusion of 100 cc. of compatible group O citrated blood. A second transfusion of 100 cc. of the same blood was given on the third day. Subcutaneous injections of 40 cc. of 5 per cent dextrose were given twice daily. The baby now took feedings well and the jaundice cleared rapidly. A third transfusion of 125 cc. of blood from the same donor was given on the tenth day after cross-matching. By the fifteenth day the jaundice had entirely disappeared and the liver and spleen could no longer be felt. While anemia recurred, it was not so severe as to necessitate further transfusion. The child developed in an entirely normal manner. Blood studies by Dr. Davidsohn four years later revealed a low titer of blocking antibodies in the Rh-negative mother. It was found that the father of this child is A_1 Rh_1 Hr-negative. Since the mother is O Rh-negative, the Rh-positive child is assumed to be O Rh_1. The donor from whom this child received blood exclusively was found to be O Rh_1. Thus the child received blood of the same Rh type as the father's blood.

The rapid improvement in these babies must be attributed primarily to the blood transfusions. This blood was in each case Rh_1, the Rh type against which it is assumed the mother had formed antibodies. It is to be noted that the father of Baby D is Hr-negative, a fact which

indicates that he is clinically homozygous for the Rh factor. Yet this child is normal in every respect. Her need of treatment in the beginning of post-natal life and the success of that treatment does not justify a label of "abnormal." Homozygous Rh-positive fathers and sensitized Rh-negative mothers may, therefore, have normal children, although the passively sensitized children will each require prompt treatment after birth.

The rationale for the use of blood of specific Rh type in the treatment of this disease is based on a concept of the pathogenesis of the disease not currently held. Analysis of our own clinical cases[a] and an earlier study of published cases from the literature[9] indicate that a passive anaphylactic sensitization, in addition to the immune reaction resulting in destruction of the infant's erythrocytes, may be responsible for the course of this disease. Rh-positive erythrocytes specific for the antibodies transmitted to the fetus from the mother should, according to this view, be more effective than non-specific Rh-positive or Rh-negative blood in combatting such a hypersensitivity. On this basis it may be inferred that the dramatic and early improvement in Baby J, after the administration of father's blood, was due to desensitization by the intravenous transfusion of Rh specific erythrocytes. Similarly, the rapid recovery of Baby D, when two transfusions of plasma had proven not only entirely ineffective but by delaying transfusions of blood had brought her to a state of dangerous intoxication, may be ascribed to the same mechanism. The prompt effectiveness of the administration of Rh specific red cells, whether from father's or donor's blood, is evidence that "hemolysis" is not the only factor in the pathogenesis of erythroblastosis fetalis.

Conclusions

Two babies, each affected by passive Rh isosensitization (erythroblastosis fetalis) were treated with Rh-positive blood. In the one case this blood was obtained from the father, in the other the donor's blood was of the same Rh type as that of the father.

Both infants responded promptly with a rapid disappearance of all abnormal findings and symptoms; the recurrent anemia was accompanied by no adverse symptoms.

Explanation of the effectiveness of this treatment is based on the concept that anaphylactic sensitization plays a major role in the pathogenesis of this disease. The value of intravenous transfusion of blood containing the specific antigen would appear to lie in its desensitizing effect.

We wish to express our appreciation of the assistance given us by Dr. I. Davidsohn in determining the Rh types and antibody titers of the parents of these infants.

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Tropical Medicine

Part VI—Spirochetal Diseases

CARROLL LaFLEUR BIRCH, M.D.

THE SPIROCHETAL DISEASES of the tropics are many and serious. In the warmer regions which are heavily forested, where rainfall is abundant and insects abound, most of the spirochetes find favorable conditions for multiplication. The spirochetes as a group could be classified between the bacteria and the protozoa. Like the bacteria they have no nuclei, but neither do they have spores. They are more flexible than bacteria and some have flagella. The spirochetes multiply by transverse division, stain with difficulty, and can not be cultured satisfactorily.

The pathogenic spirochaetacea are divided into three main groups:

1. Treponema. This group includes:

Treponema pallidum, the causative agent of syphilis.

Treponema pertenue which causes yaws.

Treponema herrijoni which causes pinta.

2. Borrelia. This group includes:

Borrelia recurrentis, the causative agent of louse-borne relapsing fever.

Borrelia duttoni which causes tick-borne relapsing fever.

3. Leptospira. This group includes:

Leptospira icterohaemorrhagiae, the causative agent of infectious jaundice.

Leptospira morsas muris which causes rat bite fever.

1. THE TREPONEMA

The treponema are tissue spirochetes.

Lues is, of course, the outstanding disease of this group. Suffice it to say that syphilis is more prevalent and more serious in the tropics than it is in the temperate zone.

Yaws has been chosen as a representative tropical disease of this group.

Yaws

Yaws, sometimes called frambesia, is an infectious contagious disease caused by the Treponema pertenue. It is characterized by three stages, primary, secondary, and tertiary.

Geographically, it is limited generally to moist regions of the tropics, where it is wide-spread.

Treponema pertenue is morphologically indistinguishable from the causative agent of lues. It is a rigid organism made up of six to eight broad spirals and measuring from eight to fourteen micra.

The clinical picture of yaws is described best under its three stages.

The primary lesion, or frambesoma, is found on the legs or feet in 70 per cent of the cases. Any abrasion of the skin may serve as a portal of entry for the Treponema pertenue. The primary lesion or "mother yaw" begins as a papule and develops into the characteristic crusted, fungoid, granulomatous ulcer measuring two to ten centimeters in diameter. Usually it is surrounded by a whitish areola which is pathognomonic for yaws. This lesion is painful and highly infectious, for the exudate is rich in treponemas. The Wassermann reaction becomes positive between the tenth to the fifteenth day. Neoarsphenamine and bismuth are curative. Healing results in a whitish scar.

The secondary stage develops three to six weeks after the onset but while the primary lesion is still present. Joint pain is frequent. Eighty per cent of the secondaries are papillomatous, similar to the primary, and are called pianomas. They are generalized and itch, and are highly infectious. The exudate under the crust contains many treponemas. In this stage the patient feels much better than he looks. Covered with fungating crusts he looks like Lazarus. One patient ex-

plained "I am only sick on the outside; on the inside I am not sick.'

The remaining twenty per cent of the secondaries are generalized eruptions thought to be allergic in reaction. They are called "framboesides." These lesions may be lichenoid, psoriatic, pityriasic, or circinate. Treponema are scarce. In this stage the disease is curative without scarring.

Late secondaries consist of palmar and plantar hyperkeratoses. These appear usually six months to twenty years after the early lesions have healed. Plantar hyperkeratosis is painful, causing a peculiar gait known as "crab yaws." No treponema can be demonstrated. In this stage cure is effected without scarring.

The tertiary stage is non-infective but the serology remains positive. Bone lesions consist of a periostitis of tibia (saber skin) radius, ulna, or phalanges. These are painful on motion but are curative without deformity.

The gummatous tertiary lesions may appear on the leg, shoulder, or elsewhere. They can be cured but leave an atrophic or keloid scar.

Another late manifestation is gangosa (mutilating rhinopharyingitis). This painful and disfiguring lesion involves the floor of the nose and the palate. Gangosa can be healed but leaves disfiguring scars and deformity.

Yaws and syphilis have much in common yet they differ from one another in many cardinal points.

These characteristics they share: Both are caused by treponemas. Both pass through three analogous stages. Both show strongly positive serology. Both respond to treatment with arsenicals.

In the following ways yaws and syphilis differ: Yaws occurs primarily in children, syphilis in adults. Yaws is limited strictly to the tropics while syphilis is universal. When yaws is introduced into the temperate zones it does not spread. Syphilis is a venereal disease; yaws is not. The primary lesion of lues is genital; that of yaws is extragenital, usually on the lower extremity. The primary lesion of yaws is painful; that of lues is not. Yaws occurs chiefly in the lower social classes while lues knows no class barriers. Yaws is primarily a rural disease, lues chiefly urban. Yaws is not congenital, lues may be. In yaws there are no mucous patches, no alopecia, no nerve deafness, and no interstitial keratitis. Usually in yaws there is no cardiac, vascular, or central nervous system involvement. Characteristically, the spinal fluid of yaws is negative. Yaws is not venereal, but is transmitted by direct or indirect contact. There is every reason to believe that yaws is transmitted mechanically by gnats and other insects from the lesions of yaws to abrasions in the skin of other persons. Yaws may also be acquired when an open lesion of the skin is brought into direct or indirect contact with a lesion of yaws. Animals injected with Treponema pertenue develop superficial lesions, while those injected with Treponema pallidum develop deep lesions. Yaws occurs almost exclusively in the native population and very rarely in Europeans. Yaws is more common in males than females. Yaws in the early stages responds to treatment in two to three months, while lues requires eighteen months to two years.

The pathological findings of yaws are manifest predominantly in the skin. The cutaneous papule may be followed by hyperkeratosis and later by erosion. A watery, yellowish secretion rich in treponemas exudes from the eroded area. This secretion dries and forms dirty yellow crusts which may become quite thick and elevated above the skin in great fungating masses. When a crust is removed the floor of the ulcer is seen to consist of red granulation tissue which bleeds easily.

Treatment. The striking response of yaws to the administration of arsenicals has established the faith of the natives in many a missionary doctor. In the primary and early secondary stages a single dose may effect a cure. In later stages, especially if there is bone involvement, prolonged treatment may be required. A satisfactory regimen for an adult in the early stage consists of three weekly intravenous injections of 0.6 to 0.9 gm. of neoarsphenamine or 0.04 to 0.06 gm. of mapharsen. This may be followed by injections of bismuth. The intensity of the treatment should depend upon the response of the patient and the serologic reaction. In the army a twenty-six day course of treatment is given, the same as for lues.

Penicillin has been reported to be an effective treatment.

The follow-up treatment is a clinical examination and serologic test every three months for one year.

Control measures are as simple as they are difficult. Prevent contact with cases of yaws. Stay away from native villages. Protect sores and cuts with dressings. Institute measures of fly control.

The Negro race is quite susceptible to this disease. Yaws was encountered among our colored troops stationed in endemic areas. Although yaws in white men is unusual it was reported in isolated instances in military personnel during World War II.

In addition to yaws there are at least three other tropical diseases caused by treponemas which are morphologically indistinguishable from the causative agent of syphilis. They are pinta, bejel, and irkinta.

Pinta is limited to the Western Hemisphere and is widespread in the American tropics. It has a predilection for the negro race. The pathological findings are limited to the skin, epidermis, and corium. Like yaws pinta progresses through three stages and has a positive serology. The secondaries are known as "pintids." Tertiary lesions have a tendency to be symmetrical and to assume various colors, slate blue, yellow, orange, and even red. Some attribute the color to secondary infection with chromogenic fungi. Eventually the colors fade and the result is leukoderma. Pinta responds to the same treatment as yaws.

Bejel is a non-venereal disease which occurs among the nomadic Arabs. It is caused by a treponema. The young chiefly are afflicted. Serological tests are positive. Lesions occur in the skin, mucous membranes, and bone. The relationship of bejel to syphilis and yaws is unknown.

Irkinta occurs among the natives of Central Australia. Hackett, who described the disease in 1936, believes it is closely related to yaws.

2. The Borrelia

Tropical Relapsing Fevers

This group of similar fevers is caused by different strains of borrelia. The borrelia are blood spirochetes. They are snake-like, and straighten out as they progress, are flexible, and vary from five to fourteen micra in length.

The European type of relapsing fever is transmitted by the body louse; the African type by a tick (Ornithodoras moubata). In China and India lice are the vectors.

Relapsing fever occurs in endemic and epidemic forms. It is widely distributed, being found in almost all countries except Australia. Short febrile attacks, of from four to ten days, alternating with fever-free periods of seven to fourteen days, characterize this group of diseases. Each relapse marks a fresh invasion of borrelia into the blood stream. They are harbored, probably, in the spleen and other organs of the reticulo-endothelial system. The European type is characterized by two or three relapses, the African by ten or more.

African relapsing fever is a serious disease. It ranks third in order of gravity, being exceeded only by malaria and African sleeping sickness. This condition may be transmitted by the bed bug and it can pass through the placenta of the infected mother to her offspring. If blood containing the borrelia be instilled into the eye or nose infection will follow, but the primary vector is the tick. The infected tick retains the organism in all parts of its body and remains infective for life, as long as five or six years. This condition is congenitally transmitted in the tick from an infected female to her eggs.

The symptoms of African or tick-borne relapsing fever are: Regular recurring bouts of fever to 104° to 105° F accompanied by bilious vomiting, jaundice, and hemorrhages into the skin and from the nose, stomach, or kidney. Pulse and respiratory rates are increased. The spleen and liver are enlarged. Leukocytosis is usual. Conjunctivitis and delirium may accompany the bouts of fever. Each period of fever terminates by crisis with sub-normal temperature and sweat. A free period of four to ten days is followed by another pyrexial wave. Positive serology is present in seven to sixty per cent of the cases.

Serious epidemics are seen usually among the poor during periods of famine and war associated with poor hygiene and vermin. The mortality varies greatly in different epidemics ranging from five to seventy-five per cent.

In the United States the disease is mild. During a five-year period, 258 cases were reported in Texas with no deaths. A number of cases are reported in California each year.

The diagnosis can best be established by demonstrating the borrelia in the blood or by injecting a mouse.

Treatment. The treatment of choice is neoarsphenamine. The drug should be given intravenously and at the onset of a paroxysm of fever, while the temperature is rising. A single dose of 0.01 gm. per kilogram of body weight will cure eighty per cent of the cases. Three injections may be required in stubborn cases.

3. The Leptospira

The members of this group are tissue and blood spirochetes.

Infectious Jaundice

This condition is known also as Weil's disease, leptospiral jaundice; contagious jaundice, and epidemic jaundice.

It is an acute febrile disease caused by the Leptospira icterohaemorrhagiae. The rat is the principal reservoir, for the excreta of the infected rat is infectious for man. Distribution is world wide, the same as the rat. Infectious jaundice is

most common among those persons exposed to rats, such as sewer workers, miners, dock and wharf hands, and workers in slaughter houses and fish markets, as well as farmers and harvesters. It occurs too during trench warfare and may be acquired as a laboratory infection. Drinking or bathing in contaminated water or the bite of an infected rat may cause the disease.

After an incubation period of six to twelve days the onset is sudden with chill and high fever accompanied by headache, prostration, and muscle pain. Bradycardia, conjunctivitis, flush, and petechial hemorrhages are common. The organisms may be found in the blood during the first three or four days of the illness. A polymorphonuclear leukocytosis with a left shift is present.

In mild cases there is no jaundice. In more severe cases the liver becomes enlarged and tender with the onset of jaundice about the fifth day. Hemorrhages from various parts of the body may occur. The output of urine may be suppressed, accompanied by an azotemia. Leptospira are present in the urine, sputum, and spinal fluid.

Fatalities are caused usually by uremia. In favorable cases convalescence begins about the third week and is prolonged.

Mortality is variable. In the trenches of Europe it was four to five per cent, in Japan thirty-two to forty-eight per cent.

Treatment. Arsenicals are of no value. In Holland specific antisera have given favorable results. Treatment is largely symptomatic, although soluble bismuth is of help.

Rate Bite Fever or Sodoku

This is a relapsing fever caused by the bite of a rat infected with the Leptospira morsus muris. It has the same geographical distribution as the rat. It is a serious infection carrying a mortality of 10 per cent in untreated cases.

Neoarsphenamine is the treatment of choice.

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Ocular Muscle Balance

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THE DIAGNOSIS and treatment of ocular muscle anomalies have frequently been considered as complicated and mysterious. The old formula of resection and recession if the patient were "cross eyed" and the same on the opposite muscles if the patient were "wall eyed" can be a thing of the past.

There are still too many who adhere to the old ways in spite of the fact that their results leave much to be desired to themselves especially. Few ophthalmologists fool themselves into thinking that the patient looks fine. They usually ask themselves why the eyes are still divergent or convergent or why the operation brought about an overcorrection.

The old diplopia and reflex tests are not satisfactory as far as surgery is concerned. The patient cannot be diagnosed after a glance and the operation decided upon after seeing whether the eyes turn in or out. Most patients with large squints do not have diplopia and the reflex tests are too gross to determine anything.

The examination of a patient with a squint, to be completely satisfactory, must be purely objective. Whatever the patient thinks he sees must be entirely left out of the diagnostic record. Subjective findings must be confined to the patient's history. Only rare and very intelligent patients can be trusted to help with the examination.

1. The first step in the examination of a muscle case should be the observation of head tilts, walk, general behavior, and external examinations. Head tilts mean nothing unless they cover a hyperphoria or tropia or a lateral paresis. If the eyes are straight after measuring, the head tilt is just a habit or is caused by something besides the eyes.

2. A complete history of the complaint. When did the squint appear? Can the patient look straight at times? Do glasses help? The history of birth injuries and general health as well as that of the family is always interesting.

3. Visual acuity with and without glasses and with a pin hole aperture in cases of reduced vision. The present prescription should be neutralized.

4. Muscle balance.
   - A. Screen test*
     - at 6 M. with glasses and without glasses.
     - at 25 cm. with glasses and without glasses.
   - B. Near point of convergence (N.P.C.)
   - C. Cover test (to determine fixing eye)
     - at 6 M. with glasses and without glasses.
     - at 25 cm. with glasses and without glasses.
   - D. Motility without glasses.
   - E. Diagnostic positions of gaze.
   - F. Synoptophore: To determine fusion and ductions.

A working diagnosis can now be made.

5. The patient should now be refracted under cycloplegia and the screen test checked again to note any difference in measurements that may occur with the accommodation somewhat relaxed.

6. Treatment is outlined.

The muscle balance depends mainly on the screen test. No other test is as objective and as dependable. It is true that measurements may vary but the variations are small and can always be explained. They will always increase with accommodation, and at one time the patient may be more attentive or less tired. But these variations will not be enough to change the diagnosis. For example, a patient will measure an esotropia of 30 prism at 6 M. and 40 prism at near and have a N.P.C. (near point of convergence) of 50 mm. The next time he may measure 45 prism at 6 M. and 50 prism at near and have a N.P.C.

*Described by Duane in Fuch's Text Book on Ophthalmology, and James W. White, Amer. J. Ophth., 27: No. 9, (September) 1944.

of 40 or 30 mm. The diagnosis remains the same, an increasing esotropia at near with a close near point, which is a primary convergence excess.

The screen test has been explained many times by the late Dr. James W. White and no explanation will surpass that of Dr. Duane's in Fuch's Text Book of Ophthalmology. The patient fixes on a spot of light at 6 M. while the examiner covers one eye and then the other, watching the ocular movements. The examiner must keep the patient's attention on the light especially when the patient is very young by talking constantly about the light. If the uncovered eye comes out to fix, the patient has an esophoria or esotropia, if the eye comes in to fix, an exotropia or exophoria. The prisms are placed base out for an esophoria or esotropia and base in for an exophoria or exotropia. If the eye comes down to fix it is called a hypertrophia, either right or left, and the prisms are placed base down over the higher eye.

Prisms are added until there is no more movement of the eye when the screen is moved from one eye to the other. The amount of prism required to stop the eye movement is the amount of esotropia or exotropia at 6 M. The same process is repeated at 25 or 33 cm. The near point of convergence is then taken with the millimeter rule and the small muscle light or pinhead. The test object is brought toward the eyes along the millimeter rule until one eye gives up fixation and turns out. This measures the near point of convergence.

These three figures, the amount of squint in the distance at near, and the near point of convergence, give the examiner the center anomaly. All divergence anomalies increase in the distance and the convergence anomalies increase at near. The near point of convergence will tell to what extent the convergence center is involved.

Measurements that increase in the distance and show a normal near point are divergence anomalies but if they are greater at near with an abnormal near point then they are primary convergence anomalies. To illustrate: A patient that measures

6 M.	30 prism ET (esotropia)
25 cm.	40 prism ET
N.P.C.	50 mm.

is a primary convergence excess because the measurements are more for near and the near point of convergence is nearer than 70 mm. which is considered normal. The diagnosis in this case would be primary convergence excess and a secondary divergence insufficiency because the divergence power is weak.

In a patient with the following measurements

6 M.	40 prism ET (estropia)
25 cm.	30 prism ET
N.P.C.	70-80 mm.

the diagnosis is a primary divergence insufficiency with a secondary convergence excess because the near point is normal. With a primary convergence excess the near point would be much closer.

The following measurements of

6 M.	20 prism XT (exotropia)
25 cm.	30 prism XT (exotropia)
N.P.C.	70 mm.
	or
6 M.	15 prism X (exophoria)
25 cm.	30 prism X (exophoria)
N.P.C.	remote

The diagnosis of the first would be a primary divergence excess with a secondary convergence insufficiency because of the normal near point, while the second would be a primary convergence insufficiency with a secondary divergence excess.

These simple rules are very important not only for personal satisfaction but because they give the basis for treatment, surgical or non-surgical.

Divergence anomalies are treated by surgery of the divergent muscles, the lateral recti. The convergent anomalies are approached by training or surgery of the convergent muscles or the medial recti.

In convergence excess due to an accommodation or refractive factor, if the eyes do not remain parallel with good fusion with the glasses and fusion training, surgery on the medial recti is avoided. The secondary divergence insufficiency should be corrected by resection of the lateral recti before attempting any surgery on the medial recti. As is known, when the accommodation relaxes the eyes will be straight at near.

Serous Cystoma of the Ovary In Youth and Old Age

Pathological Conference

The Women and Children's Hospital of Chicago

DR. PEARL M. STETLER: These two large tumors which you see here, and which I recently removed, are presented, not because they are rare, not because they offer diagnostic difficulties, but because of their similarity in two individuals separated by more than one-half a century in age. One is a school girl and the other a great-grandmother. In each case, the first symptom which brought them to the physician was a progressive enlargement of the abdomen. The resident, Dr. Moorehead, will present the histories and Dr. Schiller the pathological discussion.

DR. MOOREHEAD: Case 1262 is a fifteen-year-old high school girl whose only complaint was an asymptomatic enlargement of the abdomen and hips over a period of two to three months. There had been an eight pound gain in weight during this period. The three menstrual periods preceding admission had started about six days early and the flow was slightly less than normal. The menstrual period which had been due ten days ago had been missed.

The girl's past history included the childhood exanthema. An enlarged thymus and colitis had been treated the first year of life. Menarche was at the age of ten and the periods had always been normal until the onset of the present illness.

The pertinent family history was the death of the maternal grandmother at the age of 84 with cancer of the cervix, suspected but not proved. The mother, aged 47, had a biopsy of the cervix which proved to be benign a year ago. There was one other sibling, a normal eighteen-year-old girl.

Examination revealed a well developed, well nourished girl who did not seem ill. The skin, including the breasts, was normal. Blood pressure was 106/66; pulse and respirations were normal. All physical findings were normal except for the abdominal and pelvic. Palpation of the abdomen revealed a non-tender, hard, tense, globular mass reaching from the symphysis pubis to within a few centimeters of the costal margins. It extended into the left side, but seemed to lie more on the right side. It did not move with respirations, was dull to percussion, and a fluid wave was present. No sounds were heard on auscultation. Normal peristaltic sounds could be heard in the left flank. On rectovaginal examination a small nulliparous cervix was encountered. Above this and continuous with it was a small mass the size of a normal uterus. The large mass filling the abdomen seemed to spring from the right adnexa.

Examination of the urine showed no abnormal findings. The hemoglobin was 70 per cent; the erythrocytes were 3,750,000; leucocytes, 7,550; and the differential count was normal.

A laparotomy was performed. An 8-pound, 4-ounce cyst of the left ovary was removed. Its pedicle was slightly twisted but there was no evidence of gangrene. The right ovary was three times normal size and contained numerous small cysts. The right mesosalpinx was thickened and appeared to harbor many small cystic areas. The uterus was normal. The large cyst of the left ovary proved to be a primary multilocular, secondary unilocular, serous cystoma.

The postoperative course was uneventful.

Case 1996 is that of a seventy-one-year-old woman, a housewife, who was admitted to the hospital complaining of: (1) Pain and swelling of the abdomen gradually increasing over a period of three months. The pain was generalized, but more intense in the right flank and right lower quadrant. (2) "Gas pains" and constipation for three months. There had been no bowel movement for three days even with an enema. She had vomited intermittently for three days, but there was no hematemesis or melena. (3) Passage of small amount of dark blood vaginally four days before admission.

Her past history included a normal menstrual history with menopause at the age of 45. She had had ten normal pregnancies. The family history was irrelevant.

She was a well developed, rather obese elderly woman in pain but not in shock. The blood pres-

sure was 150/90 and the pulse was strong and regular. Physical findings were essentially normal except for the abdomen, which was markedly distended with the skin stretched tight over it. The percussion note was dull except in the right flank where it was tympanitic. On change of position the percussion findings did not alter. Peristaltic sounds were not heard. A fluid wave was detected. Tenderness was greatest in the right lower abdomen. Bimanual pelvic examination was not revealing because of the abdominal distention.

The blood count was hemoglobin 68 per cent; erythrocytes, 3,100,000. leucocytes 10,400, with 70 per cent polymorphonuclears.

An exploratory laporatomy was performed. A small amount of slightly blood-tinged fluid was present in the peritoneal cavity. There was a fourteen-pound cyst of the right ovary. The cyst wall, the right tube, and the greater part of the uterus were deep bluish-purple in color because of the twist of the ovary on its pedicle. The left tube was somewhat dark in color, but was otherwise normal, and the left ovary was not enlarged. Bilateral salpingo-oophorectomy, supracervical hysterectomy, and appendectomy were performed. Postoperatively, the patient received 500 cc. of citrated whole blood; and her course was uneventful.

The wall of the large serous cystoma (primary multilocular, secondary unilocular) was gangrenous, and the contents were clotted blood. The uterus and right salpinx were likewise gangrenous.

Dr. Walter Schiller, *Pathologist:* Both tumors are cystomas and not cysts. The term "cyst" signifies the product of dilation of the normal cavity by retention of fluid, as in the field of the ovary, follicular cyst, and corpus luteum cyst. Clinically, in small ovarian cysts and cystomas, the differentiation cannot be made in general by bimanusal examination, and in such cases, it becomes customary to use the term "cyst." But the ovarian cysts rarely reach a greater size than that of a tangerine. All cysts larger than this are "cystomas," which means genuine neoplasms. In addition to the size, which helps in advanced cases only, one more difference noticeable by clinical observation lies in the potency of the cysts to continue the endocrine function of the organ they developed from, by producing hormones, which, in women of the reproductive age, may interfere with regular menstruation. Cystomas of the ovary do not produce hormones and consequently do not interfere with menstruation.

So, both ovarian tumors, by their size, give evidence of being cystomas and not cysts. The irregularities in menstruation in the first case do not surpass irregularities frequently occurring in menarche. There is neither masculinization nor hyper-feminization in either case, as observed in hormone producing cysts, but not in cystomas.

Both cystomas developed freely toward the peritoneal cavity, neither one is intraligamentous by location. This becomes evident by the relation of the tube to the wall of the cystoma. In intraligamentous tumors as, for instance, in parovarian cysts, the tube is closely attached to the wall of the tumor and stretched by the growing of the tumor. The fimbriae are, so to say, two dimensional on top of the cystoma wall like the petals of a pressed flower in a herbarium. There is no mesosalpinx between tumor and tube, whereas in both cases in question a mesosalpinx is present. Secondary adhesions between the posterior surface of the mesosalpinx and the surface of the tumor may bring the elongated tube in touch with the tumor surface, thus simulating intraligamentous position of the tumor. This so-called pseudo-intraligamentous structure rarely involves the whole tube but mostly only the medial and distal third, as in the first case.

On opening the cystoma of the first case, a watery, serous fluid escaped. From the inside wall several crescent shaped folds originate. Microscopically, these consist of two separate connective tissue membranes each one lined on the side toward the lumen with low cuboidal to flat epithelium, on the other side attached by thin fibers to each other. Evidently these folds first divided into several compartments, the cystoma cavity. High pressure of the fluid thinned the middle parts and caused atrophy and finally necrosis, followed by establishment of wide communications between the neighboring compartments, by a mechanism similar to the merger of neighboring alveoli of the lung in emphysema.

Torsion of an ovarian tumor, as in the second case, is not very rare. In most cases the elongated ovarian ligament serves as a pedicle in the beginning. Later on the tube becomes involved and the mesosalpinx becomes thick and swollen. Involvement of the uterus, as in the second case, is rare and occurs only in the torsion of very large ovarian tumors. In the first phase of torsion the veins for their soft thin walls and their low pressure get occluded at a time when the arteries for their thick resistant wall and their higher pressure still remain patent. This way the vascular system of the twisted organ shows stagnation and passive

(*Continued on page* 232)

CASE REPORT

CLARA JACOBSON, M.D.

Pulmonary Tuberculosis, Complication, Cold Abscess

This case is presented because of the question in differential diagnosis which arose, a malignant breast tumor having been suspected. The essential features are briefly as follows:

Y. L., a young woman, 23 years old, white, gave a history of hemoptysis in January, 1945. An x-ray disclosed far advanced, fibro-ulcerative pulmonary tuberculosis, largely limited to the left upper lobe. Sputum tests proved positive. On inquiry into the family history, it was learned that the father had died of tuberculosis when Y. L. was two years old. There was no other known contact or exposure to tuberculosis. She was admitted to a tuberculosis sanatorium April 25, 1945. Sputum tests dated April 17, 18, and 19, 1945, were reported to contain 10, 100, and 5 acid-fast bacilli per field, respectively, and on April 27 and May 25, 26, and 27, after entrance to the sanatorium, specimens were also found to be positive. Pneumothorax treatments were initiated, June 7, 1945. All subsequent sputum tests proved negative. She was allowed to return to her home November 2, 1945, and tests have continued negative since that date.

On November 8, 1945, she reported that she felt very well, had gained 10 pounds in weight, and had no cough or other symptoms referable to her chest. She appeared fairly well nourished, breath sounds were diminished over the left upper lobe (due to pneumothorax), no moisture was noted, no rales heard. An x-ray revealed a 20 per cent selective collapse of left upper lobe and also increased densities which were interpreted as an early infiltrative tuberculous process in the right upper lobe. On November 24, 1945, she reported raising blood streaked sputum. On December 4, an x-ray disclosed 30 per cent collapse in the left, no increase in extent of shadows in right upper lobe, but apparent annularization. Institution of right pneumothorax was considered advisable and several attempts were made in the course of the following week, but without success because of adherent fibrous pleuritis. No progressive tendencies have been noted in subsequent x-rays to date. Neither has there been further evidence of cavitation. A 20 to 30 per cent collapse is being maintained on the left side.

Y. L. continued to feel well, but in June, 1946, she reported that she had been aware of a small lump in her right breast for three or four weeks and hoped it was not malignant. A round mass about the size of a robin's egg, 2 to 3 cm. in diameter, was felt, apparently under the right breast, attached to the chest wall, though seemingly not completely adherent. No perifocal inflammatory changes were noted and the patient claimed the lump was not tender. No fluctuation was noted. Removal and biopsy were advised. She entered the hospital on August 5. The mass then seemed slightly larger than when originally examined, and was also somewhat tender.

A cold abscess having been suggested to the surgeon, he had an x-ray taken to determine if possible whether a tuberculous osteomyelitis could be demonstrated in underlying rib. A negative report was returned. The surgeon reported that a well encapsulated mass was removed. This was found to contain very thick greenish pus, bacterial study of which revealed acid-fast bacilli. There had been no attempt at aspiration. The preoperative assumption was that of a breast tumor.

It is unusual to find an abscess so well localized that it can be removed as an encapsulated mass. This patient was fortunate here, more prompt healing being thus assured. Draining sinuses for weeks and months usually follow incision or spontaneous rupture, even aspirations, instead of a dry clean scar within two weeks as in this case.

A cold abscess on the chest wall, while not common, is not very rare. It occasionally develops after aspiration of a tuberculous empyema. Several have been seen without demonstrable pulmonary lesion of reinfection type. It may develop from a tuberculous osteomyelitis or may originate in the lymphatics. Within the past few months we have seen one from a tuberculous axillary gland in a girl, and two near the sternum in men who had only fibroid pulmonary changes; in neither instance was bone pathology demonstrated. In the case here cited the lesion could not have been caused by the attempted initiation of pneumothorax, the abscess being some distance from the needle insertions. The interesting feature of this case was the simulation of a partially adherent breast tumor. The tuberculous background and youth of the patient did not seem sufficient to the surgeon to rule out such a possibility.

Psychiatric Case Study

KATHARINE W. WRIGHT, M.D.

ELECTRICALLY-INDUCED convulsive therapy, commonly referred to as "electric-shock" therapy, is an accepted form of treatment for certain classes of mental illness at the present time and although many cures are credited to its use the basic processes involved in these cures remain speculative and obscure. The number of the treatments given, the interval between the treatments, and the dosage are all largely determined by the character of the illness, the symptomatology of the patient, or the preferred method of treatment of the doctor administering it. In the case which is our immediate study, there are several factors of particular interest in this regard.

The patient was psychotic and definitely diagnosed as a case of schizophrenia. Even a few years ago such diagnosis would, in itself, have implied a bad prognosis. Moreover, the periods of relapse were so marked as to argue, under usual standards of interpretation, the futility of continuing treatment and disposition of the case as incurable.

On the other hand, the periods of recovery and remission had a certain periodicity. Also, the marked responsiveness of the patient to psychotherapy during such periods suggested hopeful possibilities in a continuation of the treatment. These features seem worthy of note as of possible value to others treating similar cases.

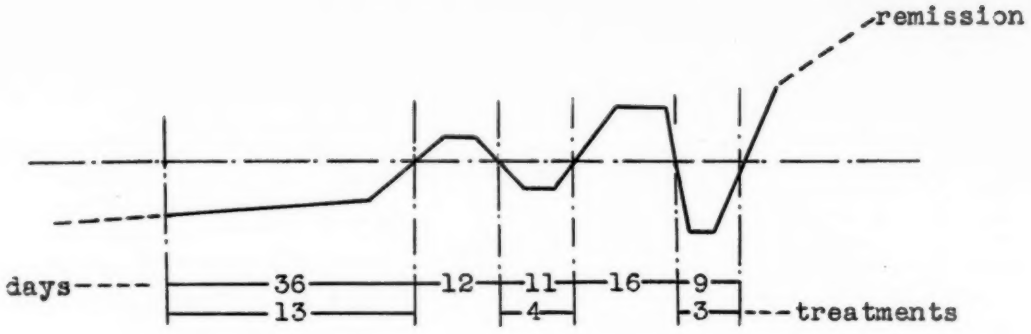
The patient was treated by the author on the ward at the Illinois Neuropsychiatric Institute for a period of six months, and then followed in Out-Patient Clinic for one year. The patient's history may be abstracted as follows:

Born in October, 1922, the patient is the third of six siblings of Hungarian parentage and the middle of three girls. The father is a coal miner who does not read or write English. The mother died of tuberculosis when the patient was 9 years old, and ever since that time, the patient has felt "different from other girls" when confronted with any reference to mothers. The older sister became the mother substitute for the family, the younger sister was pretty, petite, and physically more attractive, so that the patient from her unhappy position in the middle was unable successfully to compete for her share in the father's affections. The patient was a serious, quiet child with few friends especially among girls, and little amusement and relaxation, but with unusually good scholastic attainment, being more than half way through a college course at the time of her first attack.

There is a history of sex play with the older brother in early childhood and a definite sex experience with him at the age of 15, at which time she feared she was pregnant and worried so much that her school work suffered. In November, 1942, just before this brother left for the army, there was another sexual episode, after which the patient's behavior changed radically to that of an aggressive, domineering person. A sexual experience in the spring of 1943 with a soldier who later rejected her, greatly intensified this type of behavior, directed especially toward bossing the sisters. Later, she was rejected in an attempt to join the WAC, following which she made three different suicidal attempts. Shortly thereafter she was hospitalized because of her confused state.

On admission to the hospital, the physical and laboratory tests were negative. The mental symptoms presented were confusion, apprehension, seclusiveness, suspiciousness, rigidity, blocking of speech, and delusions of reference. The patient gradually and slowly became more co-operative with ward routine and participated in Occupational and Recreational therapy. She showed some compulsive behavior, irritability, and resistiveness during the periods between convulsive therapy treatment, but was still accessible and fairly amenable to psychotherapy at this time.

Treatment in the Hospital was administered in the form of twenty electrically-induced convulsions in broken doses of 13, 4, and 3, together with intensive psychotherapy in the intervals between.



The treatment followed a pattern as shown in the accompanying diagram.

It will be noted that the pattern of the illness follows a course of recurrent improvement and relapse, quite similar to that found in a considerable number of cases treated with metrazol convulsive therapy as described by Dr. Meduna in 1937.* The first relapse was rather typical, the patient becoming regressive in behavior on the ward and exhibiting irritability, negativeness, and an overdemanding attitude.

A much more severe relapse occurred after the second series of treatments and the following 16 days of psychotherapy. Toward the end of this period the patient had improved to such a good mental state that a visit to the younger sister was permitted. While with the sister the patient became very excited and talked continuously and incessantly throughout a night. The sister had considerable understanding of the case at this time and did not become frightened but instead took notes on the material outpoured by the patient. The patient became still more excited and aggressive in behavior and was returned to the Hospital.

This second relapse appeared to be such a frank expression of her psychosis that further convulsive therapy seemed useless and resignation of the patient to a life of custodial care as a hopeless catatonic praecox was considered. However, because of the periodic type of pattern and the good rapport secured by the therapist in the periods of accessibility, it was deemed advisable to give a few more treatments. The three final doses were administered, whereupon the patient entered a period of remission, and after maintaining this level for several weeks she reached a point of social recovery which enabled her to leave the Hospital.

In the follow-up period the patient was seen regularly twice a week for the first month and at one individual interview weekly thereafter with additional treatment in the group psychotherapy class. The psychotherapy was directed toward her gaining insight into her emotional dependence and into the compulsiveness of her need for intellectual attainment with an aim to direct her away from intellectual pursuits toward emotional security in her own social group.

Several points are of interest:

First, she accepted her need for a job where there was slight tax on her mental processes, and took a position as laboratory helper.

Second, she made social contacts with young women other than her sisters whose competition she had not been able to meet previously.

Third, she became emotionally independent of her brother when she repaid him money borrowed for college.

Fourth, she had dates with several men, one of whom, a brilliant but rather shy student, she married.

Fifth, the marital adjustment was satisfactory both sexually and socially except on one occasion when her husband made a belittling remark about her mental ability. A mild depression followed but was relieved in two psychotherapeutic treatments.

Conclusions

This case study has shown the value of sufficient number of electric-shock treatments as dem-

*Von Meduna, Dr. Ladislaus. Die Konvulsionstherapie der Schizophrenie, Marbold, Halle a S., Germany, 1937.

onstrated in a case of catatonic schizophrenia, to meet the needs of the individual.

It also teaches us that one must have awareness of the individual needs of a patient and courage enough to give the required number of treatments to satisfy these emotional, or physiological, or perhaps emotional and physiological requirements of the individual.

Most important we have demonstrated the invaluable part played in psychotherapy during period of treatment and for continued treatment over a long post-recovery period.

Opportunities For Medical Women

HULDA E. THELANDER, M.D.

UPON ASSUMING THE chairmanship of the committee on Opportunities for Medical Women, and at the same time taking over some of the work of the committee on Commissions for Women, I wish to pay tribute to the Medical Corps of the United States Navy for the fair deal it gave to the women it commissioned. The other branches of the services undoubtedly did likewise.

The opportunity granted me of serving with the military during World War II will always be regarded with the greatest satisfaction. To work with a group so disciplined as are the men of the regular Navy was a unique experience. I left the Navy with a great deal of admiration and not a little envy of its official personnel. At no other time in my medical career have I lived in an atmosphere so free from discrimination. Only gentlemen and officers disciplined in fairness could have so accepted us into a field traditionally masculine.

In observing the boys and girls of the ranks with others, I reached the conclusion that human nature is very much alike regardless of sex. A Marine Colonel returning from the Philippines said: "The women were as courageous as the men, but no more so, and there were weak individuals of both sexes." It is assumed that the systems of the body, such as the digestive and respiratory, function essentially alike; the I. Q. tests have revealed that there are very few intellectual differences between the sexes that cannot be explained by environmental impacts. The virtues of courage, loyalty, and devotion to duty are also fairly well distributed. In reproduction alone are the sexes designed to play distinct roles.

I assume this chairmanship, hoping that the day is not far distant when this committee can be abandoned; hoping that the day is near when men and women will be chosen on the basis of intelligence and training in medicine without regard to sex. In this new "one world" and the "atomic age" we need to present a united front.

DR. LUCILLE J. MARSH, Director of the Bureau of Maternal and Child Health, Florida State Board of Health, calls attention to an excellent opening in the Florida State College for Women, Tallahassee, for a well trained woman physician interested in the development of a first-rate college program. At present the College has an enrollment of 2,400 girls, and an infirmary modern in every detail, with no restrictions on the medical care given. Relations with the physicians in town and with the members of the faculty are excellent. The salary will start at $5,000 and will be adjusted higher next year. Further details can be obtained by writing to DR. DOAK CAMPBELL, Florida State College for Women, Tallahassee, Florida. The appointee will be assured of the support of all women physicians in the State.

ABSTRACTS

LEILA C. KNOX, M.D.

A COMPARATIVE STUDY OF THE TREATMENT OF TULAREMIA WITH IMMUNE SERUM, HYPERIMMUNE SERUM AND STREPTOMYCIN. Lee Foshay, M.D., Am. J. Med., 1: 180-188 (August) 1946.

Two patients suffering from tularemia were treated, one with immune horse serum on the 16th and 17th day of the disease, the other with streptomycin beginning on the 13th day of the disease. Both of these patients were seriously ill, with high fever and extensive pneumonia. Both of them responded rapidly to these therapeutic measures and recovered completely. It is the belief of the author that if the patient is desperately ill, and is seen before the 15th day, streptomycin will probably be most effective.

HYPERPLASIA OF THE THYROID GLAND IN RHESUS MONKEYS AFTER THIOURACIL TREATMENT. Earl T. Engle and Henry Aranow, Jr., Endrocinology, 38: 325-330 (May) 1946.

Thiouracil administered to Rhesus monkeys causes hyperplasia and diminished colloid production in the thyroid as in other animals and in man. The authors studied and have illustrated some of the histological lesions which developed in these animals following the prolonged administration of the drug. Practically no changes developed in the monkeys in the first 28 days, but after 73 days the gland was greatly altered in one, the epithelium was of the high columnar type, and the characteristic intrafollicular vesicle was present. All subsequent specimens obtained after long periods of treatment showed extreme hyperplasia.

NECROTIZING ARTERIAL LESIONS RESEMBLING THOSE OF PERIARTERITIS NODOSA AND FOCAL VISCERAL NECROSIS FOLLOWING ADMINISTRATION OF SULFATHIAZOLE. Louis Lichtenstein and Leon J. Fox. Amer. J. Path., 22: 665-677 (July) 1946.

The authors contribute to the literature a description of one patient whom they believe to have succumbed because of hypersensitivity to sulfathiazole. The patient was an obese Negress 61 years of age to whom about 5 grams of sulfathiazole was given in an open wound for reduction of a subcoracoid dislocation of the shoulder. The patient was in good health, and had neither hypertension nor renal disease. On the 9th postoperative day she had a chill and a temperature of 102°. A vesicular skin eruption appeared, small lesions being scattered over the trunk and extremities. Cultures were negative, and the patient was again given sulfathiazole, the impression being that an infection had developed. This was continued for 6 days, 1 gm. every 4 hours. Penicillin was substituted, but death took place 3 weeks after operation. At this time there were albuminuria, hematuria, and azotemia. Uremia ultimately developed. The free cholesterol in the serum was 75 per cent. The authors especially point out the necrotizing arterial lesions resembling those of periarteritis nodosa in the kidneys, liver, spleen, gall bladder, adrenals, uterus, and tubes. There were also focal visceral necroses in the myocardium, liver, lung, and other organs, and degeneration of the liver and kidneys. The illustrations of these lesions are very good, and those of the arteries are especially important.

HYPERSENSITIVITY IN THE PATHOGENESIS OF THE HISTOPATHOLOGIC CHANGES ASSOCIATED WITH SULFONAMIDE CHEMOTHERAPY. A. J. French, Lt. Col., M. C., A. U. S., Am. J. Path., 22: 679-701 (July) 1946.

The material from 76 autopsies and 2 additional skin biopsies from patients who had been sensitized to the sulfonamides was reviewed at the Army Institute of Pathology. These drugs included 10 or more sulfonamides, and about half of the patients had shown clinical evidence denoting sensitivity to the group.

The histopathological lesions were found most frequently in the heart, liver, and kidney. Acidophilic histiocytes were present in focal and diffuse lesions in these organs, and in small numbers in many others. The vascular lesions were characterized by fibrinoid necrosis, endothelial edema, and proliferation. Many of these lesions were significant causes of death. The author believes that great caution must be observed in both

the prophylactic and therapeutic use of the sulfonamides for minor infections.

An excellent biblography is given.

THE PATHOLOGY OF SULFONAMIDE ALLERGY IN MAN. Robert H. More, M.D., Gardner C. McMillan, M.D., and G. Layman Duff, M.D., Amer. J. Path., 22: 703-735 (July) 1946.

This paper presents a summary of the pathological changes in 22 patients presenting sulfonamide lesions at necropsy. These lesions were considered severe enough to have caused death in 7 cases, and to have been a major contributory factor in 7 others. Beside the lesions previously reported, additional granulomatous lesions were found and described as occurring in 13 cases. Splenic trabecular necrosis and inflammation were found in 6 cases, as well as polyvascular inflammatory lesions, and focal or massive necrosis of the liver, and necrosis of the bone marrow, kidneys, and other organs. The authors emphasize the probable allergic nature of these tissue changes. The illustrations are very helpful.

OCCURRENCE OF RHEUMATIC CARDITIS IN THE NATIVE POPULATION OF CURACOA, NETHERLANDS WEST INDIES. Philip H. Hartz, M.D., and Ary Van der Sar, M.D. Archives of Path., 1946 (January), Vol. 41, p. 32.

Twenty cases of acute rheumatic carditis among 1,307 autopsies in the natives in or about Curacao, were reported over a period of five years. In eleven of these, typical Aschoff bodies were found: in one case no Aschoff bodies were found, and in eight, the tissue was not available for microscopic examination, but the lesions were all typical of rheumatic carditis. The authors, therefore, believe that rheumatic carditis is more frequent in the tropics than is often stated. In a series of 124 patients, throat cultures were positive for hemolytic streptococci in 40; anhemolytic streptococci in 9; and Streptococcus viridans in 9. Scarlet fever was not seen.

PROGNOSIS IN THE NEUROLOGIC MANIFESTATIONS OF PERNICIOUS ANEMIA. R. Wayne Rundles, Ph.D., M.D. Blood—The Journal of Hematology, 1946 (May), Vol. 1, p. 209.

Twenty patients with neurologic manifestations of pernicious anemia were followed for a period of years at the Simpson Memorial Institute. Four types of disturbed functions were recognized; (1) cerebral, (2) olfactory, (3) peripheral nerve and posterior columns of the spinal cord, and (4) lateral columns of the spinal cord.

The authors found that the neurologic prognosis depended upon the type, severity, and duration of the disease and upon adequacy of treatment. They believe that intensive use of highly potent liver extracts intramuscularly, afford the best prognosis.

The Equal Rights Amendment

FOT THE FIRST TIME in its history, the Equal Rights Amendment was brought to a vote by this, the 79th Congress. After three days debate the Senate, on July 19, 1946, cast a majority vote for the Amendment, but not the two-thirds required. Members of the American Medical Women's Association who were present at the luncheon meeting in San Francisco will remember the able presentation of the provisions of the proposed Amendment and of the long fight which this year was so nearly successful, as made by DR. HELENA T. RATTERMAN. The Amendment has been presented to every Congress for twenty-three years, and plans are already being made to present it to the next Congress.

BOOK REVIEWS

ADA CHREE REID, M.D.

DISEASES OF THE RETINA by Herman Elwyn, M.D., Senior Assistant Surgeon, New York Eye and Ear Infirmary. 587 pages with 170 illustrations, 19 in color; the Blakiston Co., Philadelphia, Pa., 1946. Price: $10.00.

In his preface, Dr. Elwyn rightly states that the diseases of the retina are of great interest, not only to the ophthalmologist but to the internist and neurologist as well. This is a comprehensive and systematic presentation of the subject. The material is divided into eight parts: Part One, dealing with diseases of the retina caused by disturbances of the circulation, and Part Four, which is devoted to the inflammatory diseases of the retina, are of particular interest to the general practitioner as they contain articles on diabetic and albuminuric retinitis, on retinal changes due to blood disease, such as leukemia, polycythemia, anemia, on retinal changes in arteriosclerosis, essential hypertension, occlusion of central artery and vein, subacute bacterial endocarditis, syphilis, and tuberculosis. Parts Three and Five are of special interest to the pediatrician, as herein are described degenerative diseases of the retina on a hereditary basis. There are nineteen excellent colored photographs illustrating many of the diseases described and some of the pathological findings. Each chapter has a fairly complete bibliography. Treatment is briefly discussed. This book is recommended as a very worthwhile addition to the library of the general hospital and the general practitioner.

—Olga Sitchevska, M.D.

PERIPHERAL VASCULAR DISEASES by E. V. Allen, N. W. Barker, E. A. Hines, Jr., and Associates in the Mayo Clinic and Foundation. 871 pages, with 386 illustrations, 7 in color. Philadelphia and London: W. B. Saunders Company, 1946. Price: $10.00.

This volume is a co-operative outgrowth of the experiences and studies of the Mayo Clinic group whose interest in peripheral vascular disease was stimulated by the late Dr. George Elgie Brown. The book sets forth present day knowledge of peripheral vascular disease, giving historical background, discussing points of controversy, presenting pathology and pathological physiology, outlining therapy (the don'ts as well as the do's) all with an unusual amount of clarity which leaves the reader with a plan of action rather than a sense of frustration.

The authors emphasize the necessity of considering the patient as a complete physiological unit. Their presentation correlates surgical and medical aspects. The sections on special technics of diagnosis and of treatment are especially good. The illustrations, many in color, are excellent. At the present time, this is the best available and most useful treatise on peripheral vascular diseases.

Any doctor who treats people is bound, by the tenets of his profession, to have a working acquaintance with circulatory disorders. This book not only provides material which should appeal to clinicians and students but presents it in a way which facilitates acquisition and integration of that knowledge. The diffuse distribution of blood vessels and lymphatics, together with their immensities of function, leaves few physicians outside the range of interest of this volume.

—Audrie Leah Bobb, M.D.

PUBLIC HEALTH NURSING IN SYPHILIS AND GONORRHEA. By Evangeline Hall Morris, Associate Professor of Nursing, Simmons College, Formerly Educational Director and Social Hygiene Supervisor, Visiting Nurse Association of Boston. 239 pages with 18 illustrations. Philadelphia and London: W. B. Saunders Company, 1946. Price $2.25.

It is a step toward maintaining social gains against syphilis and gonorrhea to have, at this time, this book by Evangeline Hall Morris. With approximately 20,000 public health nurses carrying on a variety of activities in homes, clinics, schools, and industry, a review of this topic could have unmeasured effect in intelligent and sympa-

thetic understanding of the problems of social hygiene.

Advantages were gained from the war in this particular field and the chapter on this subject should be extremely interesting and valuable to the public health nurse. These are well presented so the mind of the user, in her public health approach, will show an "emotional coloration" as well as proper choice of words in discussing with the patient his problems and needs.

The review of the whole subject of syphilis and gonorrhea, of the historical and present-day methods of treatment, gives the nurse an excellent review from a scientific viewpoint. The author points out that the public health nurse may make the difference between a normal life and one distorted by psychological trauma if she can help the patient's family to accept him in his normal place in the family life. On the more positive side of family life she has the opportunity to help in the field of sex education in which she plays her part in the great field of preventive medicine.

Eleanor Franklin, B.A., R.N.

MODERN MANAGEMENT IN CLINICAL MEDICINE. By Frederick K. Albrecht, M.D., Published by The Williams & Wilkins Co., Baltimore, Md. 1238 pages. Price: $10.00

This book represents a prodigious effort on the part of the author to amass in one volume a complete body of information on the diagnosis and treatment of the diseases encountered in medical practice.

On the whole, this has been successfully done. There are, however, many shortcomings which are of necessity inevitable since no person can be well enough informed in all fields of internal medicine to judge critically the details in each. For example, on page 481, in discussing the indications for pneumothorax, the author states "Hemoptysis is an obligatory indication for the establishment of pneumothorax provided that it is known which lung is affected."

The subject material is extensive, conveniently arranged and, on the whole, adequately covered. There are exceptions, however, as, for example, the section on Rheumatic Fever (p. 265-270). The nature of the rheumatic state and its relationship to subsequent heart disease is not adequately discussed.

In the reviewer's opinion this disease is given too little attention for one which is so important as a cause of morbidity and mortality.

Despite the criticisms, the volume is up-to-date and contains much useful information. It should prove invaluable as a ready reference volume for the busy medical practitioner. A good index enhances its usefulness. The format and illustrations are excellent.

K. J. Thomas, M.D.

SPECIAL NOTICE

IN THE REVIEW of Dr. Bell's excellent book on Renal Diseases in the September issue of the JOURNAL (page 195) the name of the publisher was inadvertently omitted. The Editors regret this error and are glad to state here that the book is published by Lea and Febiger, Philadelphia.

Medical School News

Edited by EVA F. DODGE, M.D.

News items and announcements of interest to women medical students and interns will be welcomed by Dr. Dodge, University of Arkansas School of Medicine, Little Rock, Arkansas.

* * *

SEVERAL INTERESTING FACTS were brought to light in analysing the medical school announcements in the recent educational number of the *Journal of the American Medical Association*. In the United States, 31 of the 69 schools were co-educational from the time of organization. In Canada, only two of the nine schools fell into this category. Four schools in the United States, and two in Canada are not listed as co-educational. Several do not give the dates when they first accepted women students. The number of years between organization of the school and the beginning of co-education varies from one year to 163 with five schools accepting women, 100 years following their organization. In Canada, one school became co-educational four years after its organization, but four others varied from 33 to 96 years.

* * *

DR. VIRGINIA HOWARD, President of the Mississippi Medical Women's Association, has invited all women physicians in the State to assist in interesting young women college students in medicine. Material on the place of women in medicine has been prepared together with a list of the colleges in Mississippi and an outline of the new medical scholarship fund in Mississippi, which provides for a loan to young students who want to enter the field of medicine.

* * *

IN THE FINAL DISTRIBUTION recently of the estate of DR. AMY E. WHITE, who died in 1944, at the age of 82, the Woman's Medical College of Pennsylvania and its Hospital received a legacy amounting to approximately $75,000. Dr. White, a member of the Class of 1897, was born in Coudersport, Pennsylvania, in 1862. She practiced ophthalmology for many years in Chester, Pennsylvania, where she was known as a public-spirited citizen.

The Woman's Medical College of Pennsylvania has also been named as the recipient of approximately $90,000 from the $348,514 estate of DR. JANE M. JENKS-SOUTHRN, a graduate of the College in 1889, who died in 1937. Dr. Southrn's will directed that $45,000 be used by the College for the study of children's diseases, and that $45,000 be used for children's beds in the Hospital.

* * *

THE WOMAN'S MEDICAL COLLEGE opened its 97th session on September 11 with exercises in the auditorium of the College. DR. LOUISE PEARCE, Associate Member of the Rockefeller Institute, the President of the College, was the principal speaker.

* * *

Dear Madam:

With pleasure and with profit I have received your April, May, and June numbers of the JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION. I take this opportunity to thank you for introducing me to your organization. I heartily support all for which it stands.

Although I cannot be a member of the Association until my senior year in Medical School, I can share in the spirit of the group before making future application for Associate Membership. At present I am a sophomore student at New York Medical College in New York City.

Sincerely yours,
GERTRUDE V. ERIKSON

News and Announcements

Edited by ELIZABETH KITTREDGE, M.D.

Members are urged to send news items and announcements of interest to Dr. Kittredge, 3906 McKinley St., N.W., Washington 15, D. C.

* * *

DR. MADGE C. L. MCGUINNESS announces the removal of her office to 51 East 87th Street, New York 28.

* * *

DR. CAMILLE MERMOD has removed to 15 Washington Street, Newark, New Jersey.

* * *

DR. MARY T. MOORE BEATTY of Brighton, Massachusetts, was recently appointed a trustee of the Boston City Hospital, the first woman to serve on that board. In naming Dr. Beatty, MAYOR CURLEY expressed the belief that a medical woman's viewpoint would prove valuable to the hospital. Dr. Beatty was graduated from Tufts College Medical School in 1913, and has specialized in pediatrics.

* * *

DR. VERA BARZD of Baton Rouge, Louisiana, has announced her engagement to MR. E. D. HAYMON, also of Baton Rouge. Dr. Barzd is a recent graduate of the University of Pittsburgh Medical School.

* * *

DR. MARY B. DALE of Pasadena, California, has been appointed epidemiologist of the Los Angeles County Department of Health, the first woman to hold such a position in the county.

UNDER THE TITLE, "Health to Match our Mountains," the *Rocky Mountain Empire Sunday Magazine* of Denver, Colorado, recently presented a most interesting story of the activities and accomplishments of DR. FLORENCE RENA SABIN, who last year, at the age of 73, was called upon by GOVERNOR VIVIAN of Colorado to head the health committee of the Governor's Post War Planning Committee. A native born daughter of Colorado, Dr. Sabin, on her retirement from the Rockefeller Institute of Medical Research in 1938, returned to Colorado to enjoy a well earned rest. Instead, however, she finds herself active in what is to her a comparatively new field, that of public health, and there is no doubt that her accomplishments in that field will be as distinguished as her previous accomplishments in the field of research.

Of her, DR. WILLIAM WHITE said in 1929, "A study of Dr. Sabin's work shows the greatness of her achievement and the character of her mind. She is all in spirit and ideals that man or woman ever accomplishes. She belongs to the great students of both sexes, for when these have brains and the will to work I see little difference."

* * *

AT THE RECENT ANNUAL MEETING of the Illinois State Medical Society the Society's Bronze Medal for Exhibits of Exceptional Educational Value was awarded to DR. CARROLL LAFLEUR BIRCH and DR. LOUIS R. LIMARZI, Department of Medicine, Medical College of the University of Illinois, for their exhibit on Hematology.

* * *

BRANCH NO. 2—CHICAGO

FOLLOWING THE CLOSE of the meetings in San Francisco, DR. ADELAIDE D. HOEFFEL with a friend sailed from Seattle along the inland waterway to the northern part of Alaska, returning to Vancouver, British Columbia, and home by the Canadian Pacific Railway.

DR. EVANGELINE STENHOUSE and DR. CARROLL BIRCH enjoyed a post convention trip, also to Alaska, by inland waterway to Skagway, then to the Yukon Territory along the White Horse route by air, and then down the Alcan Highway to Jasper National Park.

DR. CLARA JACOBSON and DR. KATHARINE HOWELL, together with the latter's mother, stopped over in Tacoma, Washington, after the convention, and returned via Victoria and Vancouver, British Columbia, over the Canadian Pacific Railway.

OBITUARIES

Mary Buchanan, M.D.

Dr. Mary Buchanan, emeritus professor of ophthalmology, Woman's Medical College of Pennsylvania, from which she was graduated in 1899, died at the Hospital of the College on August 8, aged 76 years. After graduation, Dr. Buchanan studied for a time in Vienna, and on her return was appointed head of the department of ophthalmology in the Polyclinic Hospital. During her career she was associated with the Presbyterian and Germantown Hospitals, the Hospital of the Woman's Medical College, the Southern Home for Friendless Children, and the Norristown State Hospital. For thirty years she served as professor of ophthalmology in the Woman's Medical College of Pennsylvania and was president of its alumnae association from 1918 to 1921. She was a fellow of the American College of Surgeons and of the Philadelphia College of Physicians, and a member of the American Medical Association and the Philadelphia and National Soroptomist Clubs.

* * *

Rachel Hickey Carr, M.D.

Dr. Rachel Hickey Carr, a pioneer medical woman of Illinois, died on August 14, in St. Francis Hospital, Evanston, from shock following a fall in her home. Dr. Carr, who had reached her ninetieth year, was graduated in 1887 from the Woman's Medical College of Northwestern University, and later served as interne at Cook County Hospital, Chicago. During the Johnstown flood in 1889 she did distinguished relief work with Clara Barton, first president of the American Red Cross. She was mother-in-law of the late Stephen Vincent Benet, poet and novelist.

Maternal and Child Health Program in Mississippi

Dr. Virginia Howard, Director of the Division of Maternal and Child Health, Mississippi State Board of Health, was the visiting professor at the School of Public Health, University of North Carolina, Chapel Hill, North Carolina.

Dr. Howard gave five lectures on maternal and child health covering the subjects of Child Guidance, The Preschool Child, Hospital Care of the Newborn, The Crippled Child, and The Health Educator in a Maternal and Child Health Program.

The first complete statistical study of a State Emergency Maternity and Infant Care Program has recently been completed in Mississippi. Dr. Howard, who administered the program, reports that among the 5,516 deliveries which occurred under the program in 1944 there were eight maternal deaths, the expected number according to Mississippi's mortality rate being 22. Hospital deliveries increased under the program to 72.2 per cent as compared with 32.5 per cent, the Mississippi standard.

The Division of Maternal and Child Health of the Mississippi State Board of Health has been requested by the Children's Bureau to send copies of its literature on child health to Miss Lilla M. Newbrand of the UNRRA, Shanghai, China, for translation and use in their health education program.

Dr. Jerome A. Weaver, from the faculty of the Tulane University School of Medicine, held a series of demonstrations on pediatric technics in twenty Mississippi counties during August. He also met with the staffs of county health departments to discuss with them new advances in child health.

Excerpts from Minutes of the Annual Meeting

AMERICAN MEDICAL WOMEN'S ASSOCIATION

June 28 and 29, 1946

Hotel Canterbury, San Francisco, California

The Annual Meeting of the American Medical Women's Association convened in the Canterbury Hotel, San Francisco, California, at two o'clock, on June 28, Dr. Kate Savage Zerfoss, President of the Association, presiding.

* * *

DR. ZERFOSS: The meeting will please come to order. First, I want to express the gratitude of our organization to Dr. Helen B. Weyrauch and the San Francisco Women's Physicians' Club for receiving us here. Dr. Weyrauch is President of the Club, which will soon be a Branch of our Society.

* * *

The first order of business is to hear the reports from the various committees and the recommendations they will bring to your attention. (ED. NOTE: *Since Committee Reports have appeared or will be published in the* JOURNAL, *they are omitted here.*)

* * *

DR. ZERFOSS: We shall take just a few moments off from the reading of these reports, and I shall ask Dr. Bernice McCoy, who is here with us now, to give us a few bits of information, such as she no doubt has at her finger tips, relative to Dr. Barringer's report (*Committee on Commissions for Women Physicians in the Army and Navy*). She was a Commander in the Navy Medical Corps, now on the inactive list—is that right, Dr. McCoy?

DR. BERNICE MCCOY: Yes, I was released in February . . . I was very much interested in this report, because I had not heard anything about it; but I had a paper about six weeks ago asking if I would be wiling to go on what is called the Voluntary Reserve of the Navy—not the Regular Reserve; there are two types. I filled out the information the Navy wanted. (I fought the Battle of San Diego during the war. I was there for two years and a month.) I do not know why the Navy wants the information, but I filled out the forms sent me. To join the Regular Reserve of the Navy, one has to be under the age of 40. One has to be able to drill once a month and go out on shake-down runs, so I don't know whether a woman would be eligible for that. The other (Volunteer Reserve) is for physicians classified above 40, or those with specialties, who could be called upon in case of need. I signed up that I would be willing to join on that basis, but I do not know the type of information the Eleventh Naval District was trying to secure. I understand from Dr. Josephi—who is out here now, and who gets out of the Navy in October—that three women physicians she knows, who were in the Navy, have volunteered for service in the Regular Navy; and one, she said, had also received information that she would be put in her specialty, which is eye, ear, nose and throat. That sounds good, but as far as I am concerned, I don't know how much it means, because the information you had from Washington did not give anything very definite. But at least three have applied for it. I don't care to stay in, and I think Dr. Josephi doesn't care to stay in either.

* * *

DR. ZERFOSS: The next sequence of events will not consume very much time and we will have a little period before we have the dinner at seven. We will have the Branch reports now, and the Regional reports. Dr. Mary Margaret Frazer will take charge of this section. (ED. NOTE—*Regional and Branch reports given at the Annual Meeting have appeared in the* JOURNAL.) Regional reports given at the meeting were as follows: *North Atlantic, South Atlantic, Northeast Central, Southeast Central, Northwest Central, North West, and South West.* Regional reports were not

received from Dr. Dorathea Willgoose, regional director for *New England;* Dr. H. Gladys Kain, *Middle Atlantic* region; nor Dr. Cora Dyck, *Southwest Central* region.

Branch reports given at the meeting were as follows: Two, Chicago; Four, New Jersey; Five, Portland, Oregon; Seven, The Carolinas (given along with Twenty-nine, Atlanta, by Dr. Amey Chappell, regional director of the *South Atlantic* area); Eight, New Orleans; Ten, Wisconsin; Eleven, Southwestern Ohio; Thirteen, San Diego; Fourteen, New York City; Nineteen, Iowa State; Twenty, Blackwell; Twenty-three, Los Angeles District; Twenty-four, Kansas; Twenty-five, Philadelphia; and Twenty-six, Minnesota.

Branches not reporting were: One, Washington, D. C.; Three, Maryland; Six, Omaha; Nine, Connecticut; Ten, Wisconsin; Twelve, Columbus, Ohio; Fifteen, Cleveland; Seventeen, Illinois; Eighteen, Upper New York; Twenty-one, Colorado State; Twenty-two, St. Louis; Twenty-seven, Oklahoma; and Twenty-eight, Spokane.

* * *

The Annual Meeting reconvened at ten-ten o'clock, Saturday morning, June 29, with Dr. Kate Savage Zerfoss presiding.

* * *

DR. ZERFOSS: I am going to ask at this moment that the ballots be considered and placed in your hands so you can cast your votes, and the votes will be counted during other business.

DR. EVA DODGE: We should have an opportunity for nominations from the floor.

DR. ZERFOSS: When you have the ballots in your hands, we can consider nominations from the floor.

DR. DODGE: I think it should be called to the attention of every individual here that everyone who is a paid-up member is entitled to a vote, every branch is entitled to a vote, and every Branch that has over 25 members is entitled to a vote for each 25 members or multiple thereof, according to the Constitution. Each Branch represented here has one vote, and if they have 26 members, they have two votes.

* * *

DR. ZERFOSS: Suppose we take nominations from the floor. The nomination on the ballot for President-Elect is Dr. Beulah Cushman. Are there any nominations from the floor for this office?

Are there any nominations for First Vice-President, other than the three listed here: Dr. Ruth G. Aleman, Dr. Mary T. Glassen, Dr. Mabel E. Gardner? There being none, we shall pass to the next office.

For Second Vice-President: Dr. Theresa Scanlan and Dr. Hilla Sheriff. Any further nominations?

Dr. Berenice Stone is the only candidate for Third Vice-President. Are there any further from the floor?

Any further nominations for Secretary? Dr. Helen F. Schrack is the candidate on the ballot.

Nominations for the position of Treasurer, other than Dr. Mary Riggs Noble, the candidate on the ballot?

Next, the North Atlantic Region. Doctors Frieda Bauman, Ada Chree Reid, and Dorothy M. Rogers are the candidates. Any further nominations?

The Middle Atlantic Region: Dr. H. Gladys Kain, candidate. No further nominations?

Last, the Northwest Central Region, Dr. Jean Jongewaard being the candidate on the ballot.

Without further nominations, then, we will declare the nominations closed and I will ask you to vote as soon as Dr. Noble has checked your quota of votes. We will give you a few minutes for voting.

* * *

DR. ZERFOSS: The problem of how many votes each Branch is entitled to, I think should be taken care of before meeting. It would be an excellent plan if information could be sent to the Branches at least a month before we meet, and then we will know just what the status of each Branch is. I am very proud that we have so many large Branches which are entitled to a number of votes.

DR. ELIZABETH MASON-HOHL: Do you want a motion to the effect that it be a duty next year to have this information in advance?

DR. ZERFOSS: Yes. Perhaps it couldn't be done a month ahead of time, but it should be done sufficiently far in advance of the meeting to make it unnecessary to take time for it here. Perhaps the motion could be that at least 15 days before the meeting the Branches are to be informed by the Treasurer of the number of votes allowed each one.

DR. DODGE: It should be longer than that, for the sake of the Treasurer and the rest of us.

DR. ZERFOSS: Will you set a deadline in your motion, Dr. Mason-Hohl?

DR. MASON-HOHL: I would say it should be one month prior to the meeting of the Association, because one month would allow time to call a meeting, if necessary.

DR. DODGE: It might be put this way: Have

the number of votes each Branch is entitled to published at the same time the ballots are published. This would give the Treasurer time to get her report worked up.

DR. ZERFOSS: I think we are more interested in the information going to the Branches themselves, rather than that much space be taken up in the JOURNAL—because it would take a lot of space.

DR. DODGE: One page, or two. There are only 30 Branches.

DR. ZERFOSS: Do you accept that as part of your motion, Dr. Mason-Hohl? If so, will you restate your motion, please?

DR. MASON-HOHL: I think it would be better if the President appointed a committee to work out the rules and regulations concerning the ballots and the number of votes each Branch should have.

DR. MABEL GARDNER: The Nominating Committee should do that.

DR. MASON-HOHL: I think that would be good. I move we refer the matter of the number of votes allowed each Branch to the Nominating Committee, to be worked out previous to the meeting next year.

(*Motion seconded and carried.*)

* * *

DR. ZERFOSS: Now, I think this would be a suitable time, if you are agreeable, to receive the new Branches. I will ask Dr. Zoe Johnston, who is Chairman of the Committee on Organization and Membership, to present this motion.

DR. ZOE JOHNSTON: The two Branches which have requested membership are San Francisco and Mississippi, and I would like to move that we formally accept their request at this meeting and take them in as full-fledged members of the American Medical Women's Association.

DR. MASON-HOHL: Second the motion. What is the number of members in the San Francisco Branch?

DR. ZERFOSS: Ninety-nine. The Mississippi Branch, I believe, has just the minimum number, eight. Any further discussion? Without objections, we will take the vote. All in favor? Opposed? We unanimously and joyously receive these groups. It is so ordered . . . I think it is very interesting that the Mississippi Branch voluntarily sent in their request. There was no pressure or special solicitation made to that group this year, but I rather think it emanated from the President of their group. They held a meeting during the convention of the Mississippi State Medical Society and voted, and their petition was sent to Dr. Johnston. I rather think I see some of the influence of Dr. Bass in this, and also that of Dr. Virginia Small Lueckenbach . . . And now, Dr. Ratterman, would you like to mention the Equal Rights Amendment?

DR. HELEN RATTERMAN: Yes. Every time we meet we reaffirm our belief in equality by endorsing the Equal Rights Amendment—the Equal Rights for Women Bill. I would like to make a motion again, endorsing the Equal Rights Amendment. We should also send letters to that effect to President Truman, to Senators and Congressmen, asking for an early and favorable consideration of the Bill, which is now before both Houses.

DR. ZERFOSS: Any discussion? I think Dr. Lovejoy has cautioned us, in writing letters, to be extremely careful not to appear as lobbyists. That would be violating the income tax deduction laws. So be very cautious in wording your requests, so that you won't seem to be lobbying. Ask your questions as citizens, not lobbyists.

DR. RATTERMAN: We can mention the organization, however, can we not?

DR. ZERFOSS: Yes, but it might be desirable to do it as individuals—as doctors. Without further discussion, we will place the vote. All in favor? Opposed? So ordered.

DR. MASON-HOHL: When writing, then, it is better not to mention the American Medical Women's Association?

DR. ZERFOSS: The important thing is that you should not give the impression that this organization is lobbying. Under the income tax laws, gifts to the organization are deductible. But if we wish to keep that priviledge, we cannot lobby in Washington.

DR. CATHARINE MACFARLANE: Couldn't the activities of our Legislative Committee be easily interpreted as lobbying?

DR. ZERFOSS: No. I think not. It is considered educational and informational.

TO BE CONTINUED

Excerpts from the minutes of the Annual Meeting will be continued in the November issue of the JOURNAL.

(*Continued from page* 217)

congestion, which makes the red corpuscles pass from the lumen of the capillaries by diapedesis into the tissue. Later on, anoxemia leads to severe damage of the vascular walls and finally, to necrosis, giving way to the red blood corpuscles to dense infiltration of the tissue. Anoxemia finally provokes necrosis of the tissues which give in and let the congested blood ooze into the peritoneal cavity. In a few areas, the wall of the second case cystoma shows this terminal phase of twisting.

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